REMARKS

Claims 1 and 44-52 are pending. New claim 53 has been added. Claims 1, 44-47, and 50-52 are withdrawn as being drawn to a non-elected invention. Claims 48 and 49 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection is addressed in detail below.

As requested by the Office, Applicants have amended the specification to update the status of all applications found in the priority information.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 48 and 49 stand rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. In particular, the Office asserts that "the specification and claims do not indicate what distinguishing attributes are shared by the members of the [claimed] genus." The Office further asserts that Applicants "have not identified a function which identifies members of the genus, since the structure of the protein cannot be fully determined without a start and stop codon for the full length protein." In essence, the Office contends that Applicants were not in possession of the claimed genus. As applied to the amended claims, Applicants respectfully traverse these grounds of rejection.

First, Applicants' amended claims are directed to a substantially pure polypeptide comprising an amino acid sequence that has a least 90% identity to the amino acid

sequence of a polypeptide encoded by SEQ ID NO: 252. Support for this amendment is found, for example, on page 10 (line 18) of the specification. Accordingly, the scope of the claims is now limited to highly homologous sequences that share structural similarity and common attributes with the disclosed sequence.

With respect to the Office's concern that Applicants have claimed a protein without identifying a full length open reading frame, Applicants note that SEQ ID NO: 252 encodes a single polypeptide of 640 amino acids. On this point, Applicants direct the Office's attention to Exhibit A, which shows the predicted start and stop codons of the polypeptide encoded by SEQ. ID NO: 252. While multiple start codons and stop codons are in fact present in SEQ ID NO: 252, one skilled in the art would immediately recognize that SEQ ID NO.: 252 encodes one open reading frame that encodes a full length polypeptide. Given that SEQ ID NO: 252 encodes one and only one polypeptide, the claimed polypeptide itself is adequately described in Applicants' specification.

As clear distinguishing characteristics shared by the claimed polypeptides are disclosed in Applicants' specification, there can be no question that the written description requirement is satisfied and Applicants respectfully request that the § 112, first paragraph rejection this rejection be withdrawn.

Applicants note, for the record, that the current claim amendments were made solely for the purpose of expediting prosecution. Applicants reserve the right to pursue all canceled subject matter in this or future related applications.

Finally, Applicants note that new claim 53, which depends from claim 48, has been added. Support for this new claim is found in the specification, for example, on page 10 (line 18).

CONCLUSION

Applicants submit that the claims are now in condition for allowance and such action is respectfully requested.

Enclosed is a Petition to extend the period for replying to the Office action for one month, to and including April 12, 2004, and a check in payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 9 April 2004

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Start codon

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atcgtcatgg agcctcccat gtttcaactc ctttcctgga tatccaggaa gccgtccccc      60
accccaacaa ccaaagctgc cccaggggga ttcatccttc ctctgagcag catggaactg     120
ctcggcacgc ctcgccgccg gcagctactg gagaacatct ggcagcgcgc ctcgctatcc     180
aagcagcaat tcgaggagat ctaccggcgg ccactggcca actatgccga gctggtccag     240
cagctccctg cttcggaaaa tcatcaccat gcccatccag gcgggatgat cgatcacggc     300
ctggagatcg tggcctacgc actcaaggta cggcagacct acctgctccc gatcggcgca     360
gcgccggagt cacagtcagc ccaggctgaa gcctggtcgg ccgccgcggc gtatggcgcc     420
ctggctcatg acataggcaa gatcgtcgtc gacctgcagg ttgagctaca ggacggcagc     480
acctggcacc cttggaacgg accgatcaac cagccatacc gcttcaagta cgtgaagtcc     540
cgcgaatacc agctccacgg cgctgcctca gcacttctca tccaccaact gctaccgcgc     600
actgcactcg attggctcag tcgctttcca gagctgtggg ctcaattgat ctacctgttc     660
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accgtagacg ggaccgccat gctggtcacg ccaggaattt tcaagcgcta tgtccaagag    1680
catccggtgc ttgaaaaact ggcccaagcc aaggagacga ccggctggaa gctggtgcag    1740
cgcgcgttcg aaaaacaggg gcttcatcgg aagaccagta aaaacctgaa catctggacc    1800
atcaaggttt ctggtcctcg caagacgaaa gagctcaagg cctacctgct ccaggatccc    1860
aaattgctgt tccctgagca gcctctggac aacccaagcc tcacggtcat caccgatgcc    1920
gaaggaggtg tggaatga                                                  1938
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Stop Codon

Exhibit A